

CLAIMS

I claim:

1. A human powered vehicle having at least a front wheel, a rear wheel, a rigid frame securely mounted on said two wheels, two pedals that enable the rider to propel said vehicle by the downward push of said pedals coupled by a mechanism to the rear wheel, a steering mechanism with pivotal connection to the frame allowing the rider to control at least one wheel to steer said vehicle in multiple directions wherein the improvement comprises:

a bicycle free from the conditions of having any part of the bicycle in the area between its wheels or horizontally adjacent to that area, except its pedaling means and frontal portions of levers;

a vehicle frame, free from the conditions of having a vertically open through structure or tubular triangular frame or any portion of it the area between said two wheels or horizontally adjacent to that area;

a frame whose rear portion extends rearward beyond the axle of said rear wheel;

two adjacent right and left portions of said frame behind rear wheel axle, having connected to their vertical flat surfaces their own lever member with pivotal connection to their member surface;

a right and left lever that extends from their pivotal connection to an area below the mid-portion of the bicycle's frame;

a right and left lever having their own pedal member connected to their end portions;

a right radial member having forward slip lock connection to the right side of the rear wheel's hub;

a left radial member having forward slip lock connection to the left side of the rear wheel's hub;

a right linear transmission means linking the mechanical force of right lever directly to the right radial member and a left linear transmission means linking the mechanical force of left lever directly to the left radial member, while being capable of rotating their radial members in a back and forth rotation, wherein said hub is centrally coupled rigidly to the rear wheel of said vehicle enabling rear wheel to rotate in a one forward rotation relative to radial members;

said right and left lever systems have a principle assembly and structure configuration allowing the distance from the force being applied on each lever to their member fulcrums to be longer than the distance from the propulsion load on each lever to their member fulcrums while a rider is pedaling said two wheeled vehicle;

means enabling said right and left levers to swing in a reciprocal motion relative to each other, due to the downward push against the frontal end of the right or left lever;

means for preventing each lever from hitting the ground while the bicycle is being pedaled.

2. A human propelled vehicle as defined in claim 1, wherein said right and left levers have an approximate "L" shape or form, with the shorter side approximately in the vertical position and the longer side approximately in the horizontal position, when either lever is at its lowest rotated position;

3. A human propelled vehicle as defined in claim 1 wherein said means of enabling right and left levers to swing in a reciprocal motion is comprised of a high strength cable having a right end that is connected to the right lever and a left end that is connected to the left lever, and its cable portion between these connections is pulled over a mounted pulley wheel allowing the lever being pushed down to pull the adjacent lever up;

4. A human propelled vehicle as defined in claim 1 wherein said means of preventing the levers from hitting the ground while the bicycle is being pedaled is composed of a right chain member fastened to the right lever and a left chain member fastened to the left lever, while both chains are being suspended by opposite end portions of a shaft within the frame of the bicycle and while each shaft end is suspended by a bore through opposite sides of the frame;

5. A human propelled vehicle as defined in claim 1 wherein said right and left lever systems have a principle assembly and structure configuration, which allows the force needed to propel the rider to be projected in a downward arc motion, causing said propulsion load it is moving to be projected in a rearward arc motion, so much so that if a long line passed through the starting point and stopping point of both arcs simultaneously in either direction, they would intersect at a length, less than 40 feet from nearest said arc point.

6. A human propelled vehicle as defined in claim 1, wherein each said right and left lever have their own pedal member connected to them with pivotal ability right above the end portion of each lever;

7. A human propelled vehicle as defined in claim 1 wherein said two wheeled vehicle has a braking system for stopping front and rear wheels.

8. A human propelled vehicle as defined in claim 1 wherein said two wheeled vehicle has a handle bar coupled to the front wheel for steering the vehicle multiple direction;

10. A human propelled vehicle as defined in claim 1 wherein said frame has two outer sides formed from one piece of metal and each side is welded to the steering cylinder;

11. A human propelled vehicle as defined in claim 1 wherein the bicycle has a reverse mechanism to allow the bicycle to be moved in a backwards direction;

12. A human propelled vehicle as defined in claim 1 wherein said right and left lever systems have a principle assembly and structure configuration allowing the force being applied on each lever to be on center with their member pedal, the pedal connection to its member lever, the lever, the lever connection to the frame and the layer width of frame the lever pivots on, for maintaining the straight downward motion of each lever and for preventing undesired flexing of the lever or frame while the bicycle is being pedaled.